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APPARATUS FOR CHANGING OPERATING MODULES ON A COORDINATE POSITIONING MACHINE.

This invention relates to apparatus for changing operating modules on a coordinate positioning machine. Co-ordinate positioning machines include, particularly but not specifically, co-ordinate measuring machines (CMM), machine tools and manual co-ordinate measuring arms.

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Our earlier European patent 0566719 discloses a touch probe comprising a retaining module (such as a sensing module) and a task module (such as a stylus module). The task module is releasably mounted on the retaining module by magnetic means. A magazine comprising a plurality of storage ports is provided for the housing of task modules. The storage ports each comprise a base with a pair of jaws, the jaws having parallel docking inserts.

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The probe may be mounted on the quill of a machine which transports the probe to the storage port into which the task module is inserted. The task module has a circular lip, the upper edge of which abuts the lower surfaces of the docking inserts and which is held in place by magnetic attraction.

The task module is separated from the retaining module by upwards movement of the quill which, as the task module is retained by the storage port, breaks the contact between them.

Such a magazine and task modules enable engagement of a task module by a retaining module, and disengagement of the task module from the storage port in a single continuous movement and without any additional machine